Claims

- Method for transmitting payload information in a radio 1. communication system having at least one radio network controller (RNC), at least one base station (NodeB1, 5 NodeB2) and at least one subscriber station (UE1 ... UE6), wherein the base station (NodeB1, NodeB2), of which there is at least one, and each of the subscriber stations (UE1 ... UE6) are connected together via a radio communication interface, 10 wherein the radio network controller (RNC) is connected to an access facility of a core network (CN), wherein the payload information is made available as a service to a plurality of subscribers, wherein the subscriber stations (UE2 ... UE6) of these 15 subscribers are notified before the transmission of the payload information of the service, characterized in that the notification (NOTIF-2) to the subscriber stations (UE2 ... UE6) of the subscribers includes in at least some 20 cases a request for a reply (RESP), and that the transmission of the payload information takes place in at least some cases following receipt of the reply (RESP).
- 25 2. Method as claimed in Claim 1, characterized in that a grouping of the subscriber stations (UE3 ... UE6) into groups takes place with regard to the notification (NOTIF-2).

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3. Method as claimed in Claim 2, characterized in that the grouping of the subscriber stations (UE3 ... UE6) takes place with reference to their assignment to radio cells (A, B, C, D).

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- 4. Method as claimed in Claim 1, 2 or 3, characterized in that the notification (NOTIF-2) to the subscriber stations (UE2 ... UE6) of the subscribers either includes a request for a reply (RESP) or an information item indicating that no reply is necessary, wherein the transmission of the payload information takes place independently of a reply (RESP) in the latter case.
- 10 5. Method as claimed in one of the Claims 2 to 4, characterized in that at least one decision criterion (DECIS) is used as a basis for establishing whether a notification (NOTIF-2) including a request for a reply (RESP) or including the information that no reply is necessary is transmitted from the radio network controller (RNC) to the groups of subscriber stations (UE3 ... UE6) of the subscribers.
- 6. Method as claimed in Claim 5
 characterized in that
 a static or dynamic decision criterion (DECIS) is used,
 said decision criterion being specific to a radio network.
- 7. Method as claimed in Claim 5 or 6

 characterized in that
 the decision criterion (DECIS) takes into consideration
 the configuration of the radio network, existing knowledge
 on the radio network side about subscribers, the
 utilization of the radio resources in the radio network or
 in areas thereof, specific properties of the service, or a
 combination of the aforementioned possibilities.
 - 8. Method as claimed in one of the Claims 1 to 7 characterized in that the replies (RESP) of the subscriber stations (UE2 ... UE6) of the subscribers from whom a reply (RESP) has been

requested, and in particular the replies (RESP) of the subscriber stations (UE3 ... UE6) within a group of subscriber stations (UE3 ... UE6) of the subscribers, are not transmitted concurrently.

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9. Method as claimed in Claim 8
characterized in that
the replies (RESP) of the subscriber stations (UE2 ...
UE6) of the subscribers from whom a reply (RESP) has been requested, and in particular the replies (RESP) of the subscriber stations (UE3 ... UE6) of a group of subscriber stations (UE3 ... UE6) of the subscribers, are transmitted at random or preferably in a controlled manner with regard to the time of transmission.

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10. Method as claimed in one of the Claims 2 to 9 characterized in that the transmission of the payload information for a group takes place following receipt of the reply (RESP) of at least one subscriber station (UE3 ... UE6) of the group.

11. Radio communication system for transmitting payload information as a service to a plurality of subscriber stations (UE2 ... UE6), comprising at least one radio network controller (RNC), at least one base station (NodeB1, NodeB2) and subscriber stations (UE1 ... UE6), wherein the base station (NodeB1, NodeB2), of which there is at least one, and each of the subscriber stations (UE1 ... UE6) are connected together via a radio communication interface, wherein the radio network controller (RNC) is connected to an access facility of a core network (CN), wherein the payload information is made available as a

service to a plurality of subscribers,

wherein means are provided for notifying the subscriber stations (UE2 ... UE6) of these subscribers before the transmission of the payload information of the service,

characterized in that
means are provided so that the notification (NOTIF-2) to
the subscriber stations (UE2 ... UE6) of the subscribers
includes in at least some cases a request for a reply
(RESP), and that the transmission of the payload
information takes place in at least some cases following
receipt of the reply (RESP).

- 12. Radio communication system as claimed in Claim 11,
 characterized in that
 the radio communication system includes means such that a
 notification (NOTIF-2) is sent to groups of subscriber
 stations (UE3 ... UE6) of the subscribers.
- 13. Radio communication system as claimed in Claim 11 or 12, characterized in that

 means are provided preferably in the radio network controller (RNC) for establishing, on the basis of at least one decision criterion (DECIS), whether a notification (NOTIF-2) including a request for a reply (RESP) or including the information that no reply is necessary is transmitted from the radio network controller (RNC) to a group of subscriber stations (UE3 ... UE6) of the subscribers.

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